

ATTACHMENT IV-3

FIRE PROTECTION PLAN

1. PURPOSE

The purpose of this plan is to specify the precautions that shall be taken by the Permittee to prevent loss of life and/or property due to fire at the Facility. These precautions include preventive actions and implementing procedures for minimizing the consequences of un-prevented fires.

2. BUILDING CONSTRUCTION

The Mixed Waste Treatment Building, Mixed Waste Operations Building, and Mixed Waste Storage Building are pre-engineered metal buildings. The buildings are classified as non-combustible, non-rated buildings. The buildings were constructed in accordance with Tooele County fire codes.

3. FIRE/EMERGENCY ALARMS

- a. At a minimum, the Mixed Waste Treatment Building and Mixed Waste Operations Building shall contain three alarm systems:
  - i. an emergency evacuation alarm,
  - ii. a combustible gas/carbon monoxide alarm, and
  - iii. a sprinkler flow alarm.
- b. At a minimum, the Mixed Waste Storage Building shall contain two alarm systems:
  - i. an emergency evacuation alarm, and
  - ii. a carbon monoxide alarm.
- c. Emergency evacuation alarms shall have, at a minimum, a switch located within the work area. Both visual and audio emergency evacuation alarms shall be

provided.

- d. The Mixed Waste Treatment Building shall contain a combustible gas/carbon monoxide alarm system with at least one combustible gas monitor and one carbon monoxide monitor provided near the receiving tank and sump. These detectors shall activate a visual and audio alarm located near the work area.
- e. The Mixed Waste Storage Building shall contain a carbon monoxide alarm system with monitors located within the operating bay. The visual and audio alarm for this system shall be located on the north wall of the operating bay, above the emergency exit.
- f. The sprinklers systems at the Mixed Waste Treatment Building and Mixed Waste Operations Building shall be supplied with a sprinkler-flow alarm to warn of fire or accidental leakage from the sprinkler system.

#### 4. SPRINKLER SYSTEM AND FIRE HYDRANT

- a. The Mixed-Waste Treatment Building and Operations bay area of the Mixed Waste Operations Building shall be equipped with a dry-pipe sprinkler system designed in accordance with NFPA 13 for Ordinary Hazard Group 2 as defined by the latest applicable codes.
- b. The sprinkler pipes in the dry-pipe system shall be filled with compressed air. Sprinkler heads shall open due to fire, air pressure drop, or if water is automatically admitted through a dry-pipe valve. The system shall be supplied with a sprinkler-flow alarm to warn of fire or accidental leakage from the sprinkler system.
- c. Water for the system shall be supplied from a 55,000 gallon (minimum) tank system located approximately 50 feet to the south of the Mixed Waste Treatment Building. This tank system shall also supply process water for the Mixed Waste Operations Building. The supply line for the sprinkler systems shall be constructed in such a manner that a minimum of 45,000 gallons of water shall be available for use in either of the sprinkler systems. The supply lines for the process water shall be constructed such that only water in excess of the 45,000 gallons is available for use as process water. This shall be done by installing the process water inlet at an elevation such that it cannot draw water below the 45,000 gallon limit.

- d. Water from the tank system shall be supplied to the sprinkler systems by electrically driven water pumps located in the pump/blower building. This pump shall operate independent of all other pumps in the building. The pump shall be a UL listed and/or FM approved fire pump. A backup diesel-powered generator shall provide power to the pump in case of an electrical power outage emergency.
- e. The tertiary shredder shall be equipped with a foam-water fire suppression system. Water for this system shall be supplied from the Mixed Waste Treatment Building fire sprinkler system. The foam-water fire suppression system shall be operational any time flammable material is processed within the tertiary shredder.
- f. In addition to the sprinkler systems, two-way wall hydrants shall be located on the pump/blower building. Water shall be provided to the wall hydrant by the same pump and tank system that supplies water to the sprinkler systems.
- g. The fire sprinkler systems shall be visually inspected for obvious damage and to see that the valves are open on a weekly basis. On a yearly basis (once every 12 months), the fire systems shall be inspected by a fire-protection contractor. The yearly inspection shall be conducted in accordance with NFPA requirements.

## 5. FIRE EXTINGUISHERS

- a. Fire extinguishers shall be provided for the facility as listed below. The fire extinguishers shall be 20 lb., A-B-C multipurpose, dry chemical with a UL rating of 20-A; 120-B:c.
  - i. At least six portable fire extinguishers shall be provided for the Mixed Waste Treatment Building.
  - ii. At least four portable fire extinguishers shall be provided for the Mixed Waste Storage Building.
  - iii. At least eight portable fire extinguishers shall be located in the operating bay of the Mixed Waste Operations Building.

END OF ATTACHMENT IV-3